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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,843	08/26/2003	Charles Huang	690068.587C1	3857

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EXAMINER	
TRUONG, TAMTHOM NGO	
ART UNIT	**PAPER NUMBER**
1624	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/648,843	HUANG ET AL.	
	Examiner	Art Unit	
	Tamthom N. Truong	1624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2-24-04 (Prelim. Amdt)*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2-24-04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

SDD

DETAILED ACTION

Applicant's preliminary amendment of 2-24-04 has been entered. Claims 1-16 are pending.

Claim Rejections - 35 USC § 112, Second Paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 8-10 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The following reasons apply:

a. Claim 8 is a substantial duplicate of claim 1 because the intended use in claim 8 does not have patentable weight.

b. Claim 9 depends on claim 1 for the definition of X, but formula (IIa) does not have variable X. Thus, the relationship of X with formula (IIa) is unclear.

c. **Use claim:** Claim 10 provides for the use of compounds of formula (I), but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

d. Claim 12 recites formula IX with no structure or chemical name. It is unclear what moiety formula IX represents. Also, claim 12 recites the abbreviation of "e.g." which means "for example". The phrase "for example" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Use claim: Claim 10 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Double Patenting

A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A **statutory type** (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer **cannot** overcome a double patenting rejection based upon 35 U.S.C. 101.

3. Claims 5 and 8 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 5 and 9 of prior U.S. Patent No. **6,482,836** (US'836). This is a double patenting rejection.

a. The two compounds recited in claim 5 of US'836 are the same as those recited in the instant claim 5.

b. Formula (II-a) recited in claim 8 of US'836 has the same scope as formula (IIa) recited in the instant claim 9. Note, when X is CH, formula (IIa) of US'836 has a *quinolinyl* core which is the core of the instant formula (IIa) even though claim 9 depends on claim 1 for other variables which have the same scope as those recited in claim 8 of US'836.

The **nonstatutory double patenting** rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-4, 6, 7, 11, 13-16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4, 6, 7 and 10-14 of U.S. Patent No. US **6,482,836** (US'836). Although the conflicting claims are not identical, they are not patentably distinct from each other for the following reasons:

The compounds and composition of formula I recited in claims 1-4, 6 and 7 of US'836 overlap with those in the instant claims 1-4, 6 and 7, particularly when X is CH while R^1-R^7, Ar^1, Het^1 and Ar^2 have the same scope in both instances.

The process of making formula I recited in claim 10 of US'836 corresponds to the process recited in the instant claim 11, particularly when X is CH while R^1-R^7, Ar^1, Het^1 and Ar^2 have the same scope in both instances.

The methods of use recited in claims 11-14 of US'836 correspond to the methods of use recited in the instant claims 13-16. Note, the instant claim 13 depends on claim 1, which recites formula I that overlaps in scope with the formula I of US'836 as discussed above.

Formula I of US'836 differs from the instant formula I by not having X as N. However, such a difference in scope would constitute a genus/subgenus situation. It would be within the level of the skilled artisan to recognize that formula I of US'836 is a subgenus of the one claimed herein. Thus, it would have been obvious to select those compounds claimed herein with X as CH in view of the subgenus claimed in US'836.

5. Claims 1-4, 6, 7, 11 and 13-16 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5, 7, 8 and 10-13 of U.S.

Patent No. US **6,610,678** (US'678). Although the conflicting claims are not identical, they are not patentably distinct from each other for the following reasons:

The compounds and composition of formula I recited in claims 1-4, 7 and 8 of US'678 overlap with those in the instant claims 1-4, 6 and 7, particularly when X is N while R^1-R^7, Ar^1, Het^1 and Ar^2 have the same scope in both instances.

The process of making formula I recited in claim 5 of US'678 corresponds to the process recited in the instant claim 11, particularly when X is N while R^1-R^7, Ar^1, Het^1 and Ar^2 have the same scope in both instances.

The methods of use recited in claims 10-13 of US'678 correspond to the method of use recited in the instant claims 13-16.

Formula I of US'678 differs from the instant formula I by not having X as CH. However, such a difference in scope would constitute a genus/subgenus situation. It would be within the level of the skilled artisan to recognize that formula I of US'678 is a subgenus of the one claimed herein. Thus, it would have been obvious to select those compounds claimed herein with X as N in view of the subgenus claimed in US'678.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by **Selby** (US 5,110,347 or US'347).

On column 21, Table 1 lists several quinoline compounds – two of which read on the instant formula I with the following substituents (see the 3rd and 4th compounds from the bottom of the list):

i. X is CH (corresponds to the reference's R^4 as hydrogen);

ii. R^1 (corresponds to the reference's R^8) is alkyl or OR^7 wherein R^7 is alkyl;

iii. R^2 (corresponds to the reference's R^5) is alkyl substituted with fluoride.

Note, the alkyl group represented by R^2 is opened for substitution since no indication of only unsubstituted alkyl is intended.

iv. R^3 is Ar^1 wherein Ar^1 is a phenyl group substituted with CF_3 (or trifluoromethyl). Note, the reference's R^3 corresponds to the substituent of the instant Ar^1.

v. One of R^4 and R^5 is hydrogen, and the other is an alkyl group.

Thus the quinolinyl compounds of the instant formula (I) is clearly taught by Selby.

No pending claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamthom N. Truong whose telephone number is 571-272-0676. The examiner can normally be reached on M-F (9:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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9-26-05

Tamthom N. Truong
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Art Unit 1624

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